

Proteins involved in cell division

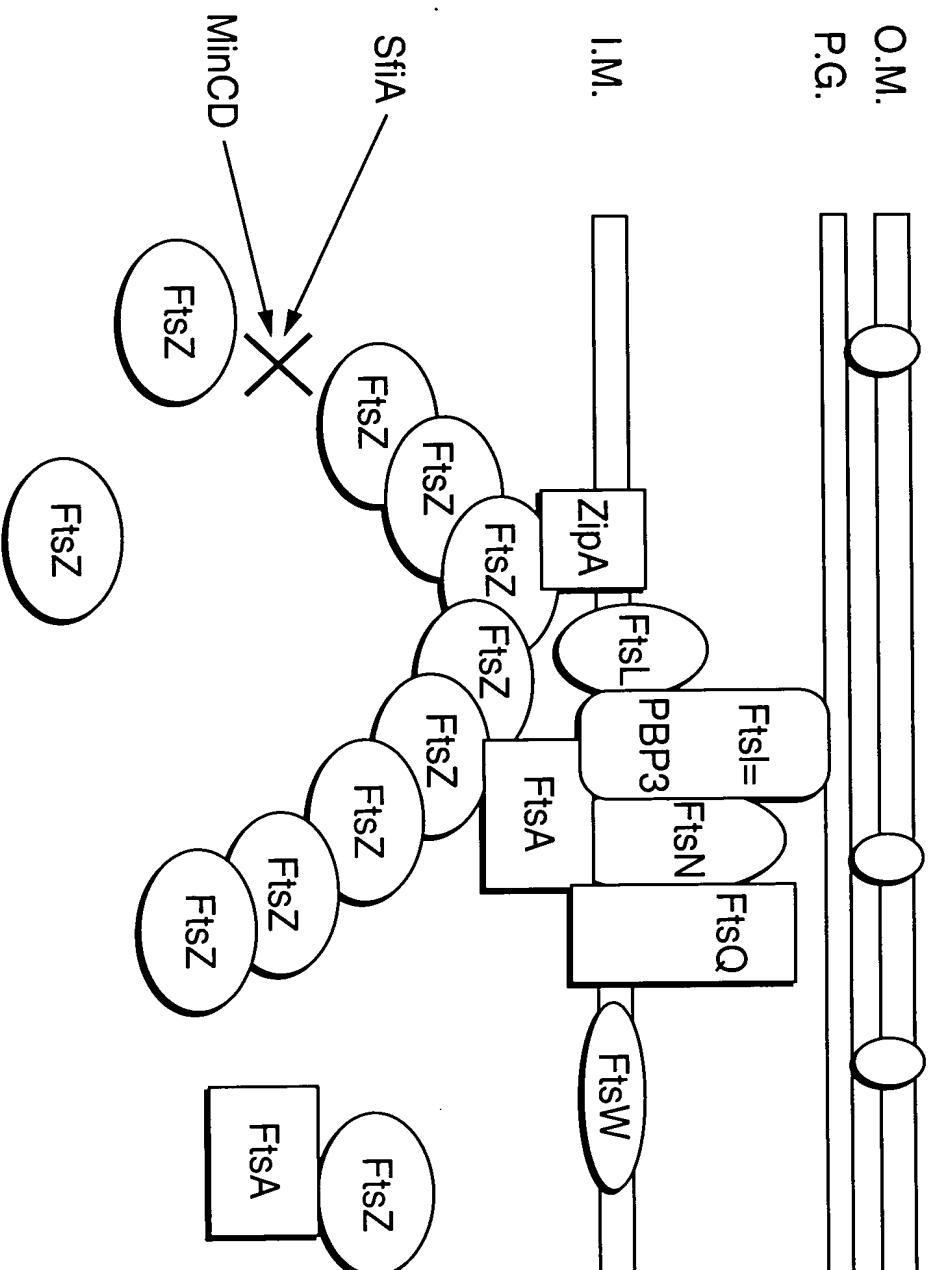


FIG. 1

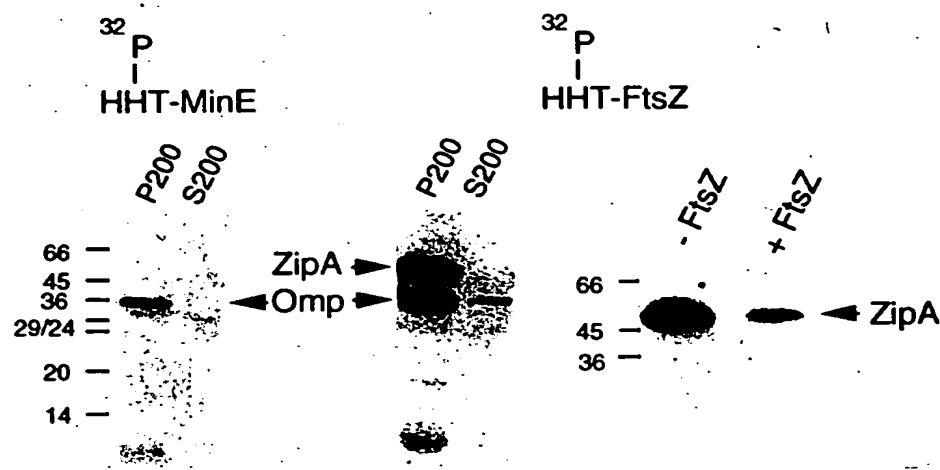
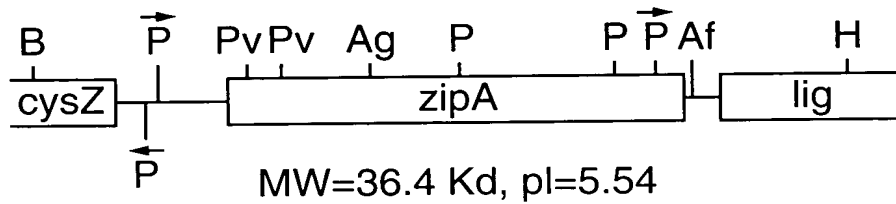


FIG. 2

ZipA protein



MW=36.4 Kd, pI=5.54

12.5% Proline

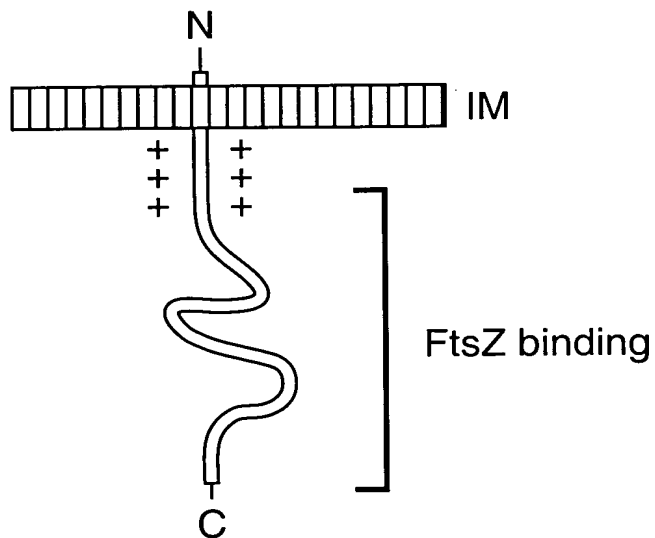
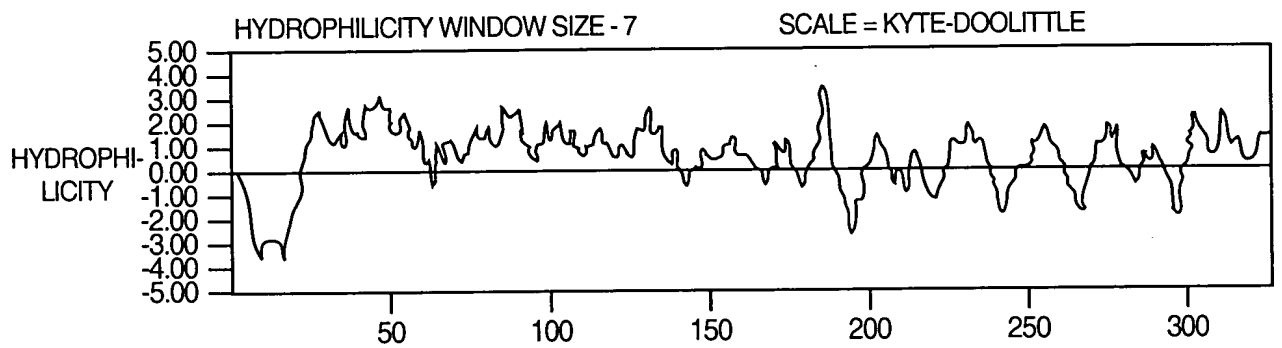


FIG. 3

1 CAATACCAAGCATGAAGTAAGAATTAGTAATACAAATTGCGCGCGGAGATACCAAGCAAAATTTTGGCAATTGCGGTTTCATGATTCGGGCACATCTTTTCATGATACCGAAATCCGGG

121 TATCTGGCGGTGTAAGCGGCATCATCTGCTTCCAGTTGTTTCAGCCATAAACCCTTAAACGAGCGGCAATCCAGTTAGCAATCTGTGAGAGAAATAGCCAAACATAACAGCAGC

241 AGATGACACCGAGAGCGCCACAACAGATACTCAGCCATTGTAGCCAGTCCGGAACGTACTATGAGAGTGGGATCCAGACATCCAGCTGTGTAAGAGCCACCAGAAATGCGCCCCCA

361 TCAACAAATATTTGACCACAGCGGTAAATAACGAACGCCAATCCAGGTTGCGAGACGAGCTTCCAGCCTTCCGCAAAATAGTAAAAACCCCTGCCGTGGGCGAGATGTAATGATC

481 AAACCAATAATCAGATGAGCTCCTTTGACCAATCCAGAAATTTCTGCGTATTTTACCGGGTAATTCCGCAATGACAGATTAGGATATGTTGCAAAAAACAGCAAAAAACAGATTTC

601 ATCTATCTTTGCTGCTGAAAGTTAATAGTGCACCTTGCACTTGAGGTAAATCGCAAAATACCTTACTAGATAAATGTTTGCCGTGCTGCGCAAGCTGTTAGAACACAGAGATATATATGA

721 TGCAGATTTCGCTGTGATATTAATCATTGTTGGCGCGATCGCCAAATACCTTACTGTAATGCTTTCTGACACAGCCGTAAGACAGATCTTCTATGTTCCGCGATCGGCCATTAA

841 AACGAATGAAGTCAAAACGTGACGACGATTCTTATGACGAGATGTCGAAGATGATGAGGGCTTGAGGTTCTGTTACCCGCTGAATCATGCCCGGCTAACGCTCAGAGCATG

961 AGGCTGCTCTGCTGCGCGCAACAGTACCAACCGCTTATGCTGCGCAGCGCGCTCAACCGGTCCAGACAGCCGCTGAAGCGCAGGTACCGCGCAACATGCTCCGATCCAC

1081 CCGAGCCGCTGACGACGCTGCTTATCAGCCGACGCTGACAGCCGCTTGCAGCAGCCAGTTGCGCACAGTGCAGCCAGCGCGCAAGCTGTGCAATTGACGACCGCAACCGGCGCAAC

1201 AGGCTTTCAGGCTGACGACCGCTGAGCGGACACAGCCGCTGAGCTGAGCGGAACCTGCTCAGTTATGATAAACGAAGCGCAAGACCGGTGATTAATGAACTGCGCGCGC

*Bgl*II A F Q P A E P V A A P Q P E P V A E P A P V M D K P K R K E A V I I M N V A A H

*Pvu*II Q D L R L I L I I V G A I A I I A L L V H G F W T S R K E R S S M F R D R P L K

*Pvu*I Q P V Q Q P A Y Q P Q P E Q P L Q Q P V S P Q V A P A P Q P V H S A P Q P A Q Q

*Age*I *kpn*I R M K S K R D D S Y D E D V E D D E G V G E V R V H R V N H A P A N A Q E H E

*Pvu*I *zip*A--> M M

FIG. 4A

1321 ATCAGGTA¹GCAGAGCTAAACGGTGAAGCTCTTCTTAACAGCATTCAACAAGCGGCTTCATTTTGGCGATATGAATATTACATCGTCATTAGCCCGGATGGACGGCCGCGT
H G S E L N G E A L L N S I Q Q A G F I F G D M N I Y H R H L S P D G S G P A L
KpnI PstI

1441 TATTACGCCITGGGAATATGCTGAACCGGAACTTTGATCCTGAATGAAGATTCACTACTCCGGGTGCTACTATCTTTATGACAGTACCGCTTTAGCGGTGACGAGCTGACAGACT
F S L A N M V K P G T F D P E M K D F T T P G V T I F M Q V P S Y G D E L Q N F

1561 TCAAGCTGATGCTGCAATCTGGCGACGATATTGCCGATGAAGTGGCGGTGCTGCTTGACGATCAGCGCGGTATGATGACTCCGAGAAATTGGCGAGTACCAGACATCATCCGG
K L M L Q S A Q H I A D E V G G V L D D Q R R M M T P Q K L R E Y Q D I I R E
AflII

1681 AAGTCAAGACGCCAACGCCCTGATACACTTAAGGCAATTAACCTCCTCTTCGAACCCCGCTTGCGGGGTTTTTACATTGATGCTCGATATGAATCAATCGAACAACAACCTGACA
V K D A N A

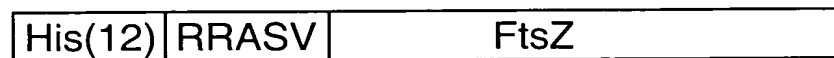
1801 GAACTCGGAACGACGCTTCGCCATCATGAATATCTTTATCATGTGATGGATGCGCCGGAATTCCGACGCTGAATACGACAGGCTGATGCGGAAGTGGCGGAGCTGGAAACCAACAT
HindIII

1921 CCAGAACTGATTACGCCCTGATTCGCCCTACTCAACGTGTAGCGCTGCGCGCTGCGGCTTTCAGCCAGATACGCCCATGAAGTACCAATGCTGTCACTGGAATAACGTTTITGATGAAGAA

2041 AGCTTCTTCTTCAACAACGCTGCAAGACCGTCTGA¹AAACAACGAAAGTCAACCTGTGCTGTGAGCTGAAGCTGATGCTTTCGCCGTACGTAATCTGTATGA¹AAATGCCGTT

FIG. 4B

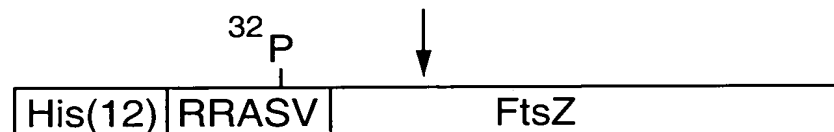
Interaction Cloning



+ Heart Muscle Kinase

+ [γ ³²-P]ATP

Gel Filtration



Far Western



Expression Library

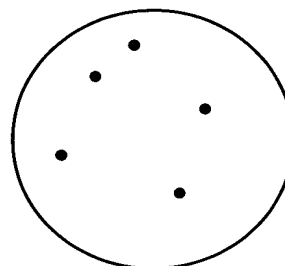


FIG. 6

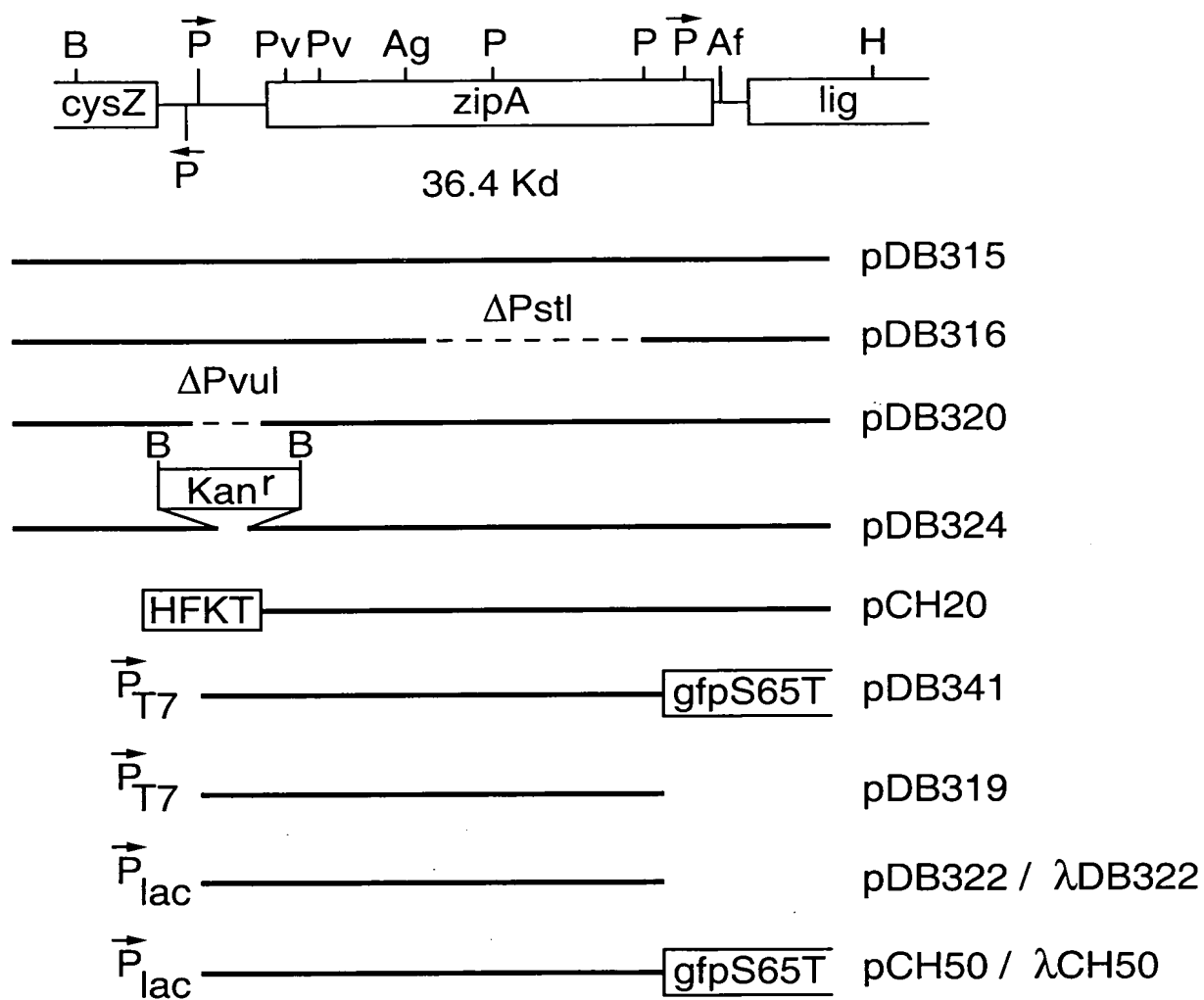


FIG. 7